

## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Assistant Commissioner for Patents  
United States Patent and Trademark  
Office  
Box PCT  
Washington, D.C.20231  
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 23 May 2000 (23.05.00)	
International application No. PCT/US99/20460	Applicant's or agent's file reference 30435.50WO01
International filing date (day/month/year) 03 September 1999 (03.09.99)	Priority date (day/month/year) 03 September 1998 (03.09.98)
Applicant DARRAH, Byron, C. et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

29 March 2000 (29.03.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Olivia RANAIVOJAONA
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

REC'D 12 JUL 2000

PCT

Applicant's or agent's file reference 30435.50WO01	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US99/20460	International filing date (day/month/year) 03 SEPTEMBER 1999	Priority date (day/month/year) 03 SEPTEMBER 1998
International Patent Classification (IPC) or national classification and IPC IPC(7): G06F 13/00, 13/14 and US Cl.: 709/200, 201, 202, 203		
Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 4 sheets.
- ☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority. (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT)
- These annexes consist of a total of 0 sheets

3. This report contains indications relating to the following items

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of report with regard to novelty, inventive step or industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  29 MARCH 2000	Date of completion of this report  19 MAY 2000
Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231  Facsimile No. (703) 305-3230	Authorized officer  IVAN PIERCE <i>James R. Matthews</i>  Telephone No. (703) 308-1058

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/20460

**I. Basis of the report****1. With regard to the elements of the international application:\***☒ the international application as originally filed☒ the description:

pages 1-22 , as originally filed  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

☒ the claims:

pages 23-31 , as originally filed  
pages NONE , as amended (together with any statement) under Article 19  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

☒ the drawings:

pages 1-7 , as originally filed  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

☒ the sequence listing part of the description:

pages NONE , as originally filed  
pages NONE , filed with the demand  
pages NONE , filed with the letter of \_\_\_\_\_

**2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item**

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b))☐ the language of publication of the international application (under Rule 48.3(b)).☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3)**3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:**☐ contained in the international application in printed form☐ filed together with the international application in computer readable form☐ furnished subsequently to this Authority in written form.☐ furnished subsequently to this Authority in computer readable form☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.**4. ☒ The amendments have resulted in the cancellation of:**☒ the description, pages NONE☒ the claims, Nos. NONE☒ the drawings, sheets 4/4 NONE**5. ☒ This report has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\***

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\*Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US99/20460

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

## 1. statement

Novelty (N)	Claims <u>1-34</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-34</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-34</u>	YES
	Claims <u>NONE</u>	NO

## 2. citations and explanations (Rule 70.7)

Claims 1-34 the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly suggest a method of executing a remote procedure in a remote processor from a client process executed in a local processor, comprising the steps of:

accepting a remote procedure call identifying the remote procedure including a global remote procedure locator;

translating the remote procedure call into a CGI-compatible information transfer protocol;

transmitting the translated remote procedure call to the remote processor;

interpreting the translated remote procedure call into a remote procedure-compatible format; and

invoking the remote procedure in the remote processor, CLAIM 1.

----- NEW CITATIONS -----

NONE

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: Boxes I - VIII

Sheet 10

**I. BASIS OF REPORT:**

5. (Some) amendments are considered to go beyond the disclosure as filed:

NONE



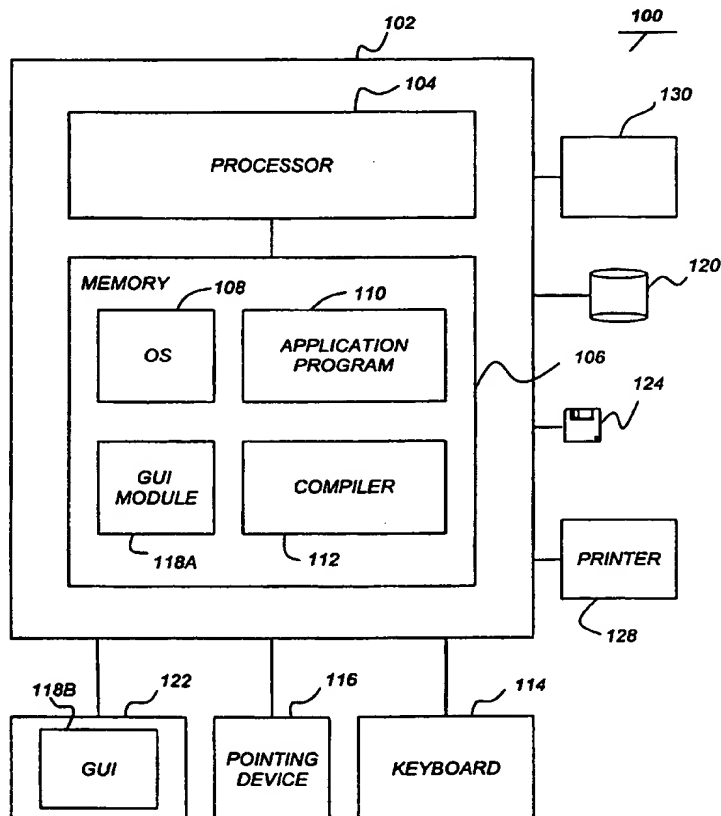
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>7</sup> : <b>G06F</b>		A2	(11) International Publication Number: <b>WO 00/14620</b>
			(43) International Publication Date: 16 March 2000 (16.03.00)
(21) International Application Number: PCT/US99/20460 (22) International Filing Date: 3 September 1999 (03.09.99) (30) Priority Data: 60/099,025                      3 September 1998 (03.09.98)                      US (71) Applicant (for all designated States except US): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 12th floor, 1111 Franklin Street, Oakland, CA 94607-5200 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DARRAH, Byron, C. [US/US]; 546 Prospectors Road, Diamond Bar, CA 91765 (US). KLINGER, Allen [US/US]; 12515 Rosy Circle, Los Angeles, CA 90066-6926 (US). (74) Agent: COOPER, Victor, G.; Gates & Cooper, Suite 1050, 6701 Center Drive West, Los Angeles, CA 90045 (US).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> Without international search report and to be republished upon receipt of that report.	

(54) Title: METHOD AND APPARATUS FOR EXECUTING REMOTE PROCEDURES IN A REMOTE PROCESSOR FROM A CLIENT PROCESS EXECUTED IN A LOCAL PROCESSOR

## (57) Abstract

A method, apparatus, article of manufacture, and a memory structure for executing remote procedures (214) in a remote processor (220) from a client process (204) executed in a local processor (218) is disclosed. The method comprises the steps of accepting a remote procedure call having information identifying the remote procedure including a global remote procedure locator; translating the remote procedure call into a CGI-compatible information transfer protocol; transmitting the translated remote procedure call to the remote processor (220) interpreting the translated remote procedure call into a remote procedure-compatible format; and invoking the remote procedure (214) in the remote processor (220) to produce at least one remote procedure output value from the remote procedure input value. The article of manufacture comprises a data storage device tangibly embodying instructions to perform the method steps described above.



**FOR THE PURPOSES OF INFORMATION ONLY**

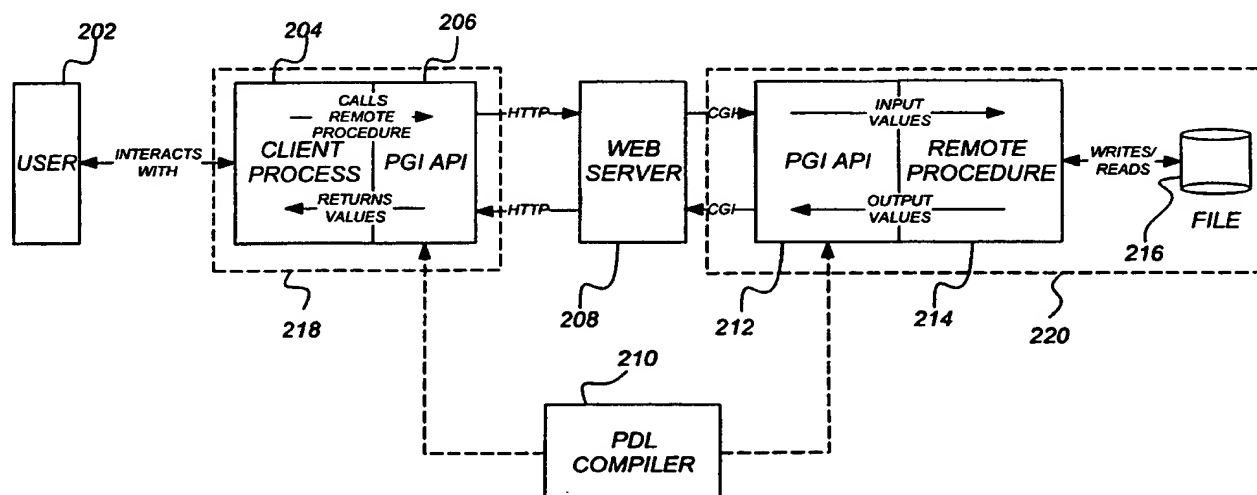
Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification n <sup>6</sup> : G06F 13/00, 13/14		A3	(11) International Publication Number: WO 00/14620
			(43) International Publication Date: 16 March 2000 (16.03.00)
(21) International Application Number: PCT/US99/20460 (22) International Filing Date: 3 September 1999 (03.09.99) (30) Priority Data: 60/099,025 3 September 1998 (03.09.98) US (71) Applicant (for all designated States except US): THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 12th floor, 1111 Franklin Street, Oakland, CA 94607-5200 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): DARRAH, Byron, C. [US/US]; 546 Prospectors Road, Diamond Bar, CA 91765 (US). KLINGER, Allen [US/US]; 12515 Rosy Circle, Los Angeles, CA 90066-6926 (US). (74) Agent: COOPER, Victor, G.; Gates & Cooper, Suite 1050, 6701 Center Drive West, Los Angeles, CA 90045 (US).			(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i> (88) Date of publication of the international search report: 2 June 2000 (02.06.00)

**(54) Title:** EXECUTING REMOTE PROCEDURES IN A REMOTE PROCESSOR FROM A CLIENT PROCESS EXECUTED IN A LOCAL PROCESSOR



**(57) Abstract**

A method, apparatus, article of manufacture, and a memory structure for executing remote procedures (214) in a remote processor (220) from a client process (204) executed in a local processor (218) is disclosed. The method comprises the steps of accepting a remote procedure call having information identifying the remote procedure including a global remote procedure locator; translating the remote procedure call into a CGI-compatible information transfer protocol; transmitting the translated remote procedure call to the remote processor (220) interpreting the translated remote procedure call into a remote procedure-compatible format; and invoking the remote procedure (214) in the remote processor (220) to produce at least one remote procedure output value from the remote procedure input value. The article of manufacture comprises a data storage device tangibly embodying instructions to perform the method steps described above.



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## INTERNATIONAL SEARCH REPORT

 International application No.  
PCT/US99/20460

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) : G06F 13/00, 13/14

US CL : 709/200, 201, 202, 203

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/200, 201, 202, 203

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST USPATFULL

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X,P	US 5,857,191 A (BLACKWELL JR. et al) 05 January 1999, see entire document.	1-34
X,P	US 5,828,833 A (BELVILLE et al) 27 October 1998, see entire document.	1-34
X,E	US 5,956,509 A (KEVNER) 21 September 1999, see entire document.	1-34
X,P	US 5,892,900 A (GINTER et al) 06 April 1999, see entire document.	1-34

☐ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"U" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

21 DECEMBER 1999

Date of mailing of the international search report

07 MAR 2000

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